



IFW

MAIL STOP PCT  
Attorney Docket: 26681U

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Group Art Unit: 1624

KIM et al.

Examiner: Unknown

Serial Number: 10/528,461

Filing Date: March 21, 2005

Title: **6-METHYLPYRIDINE DERIVATIVES, METHOD FOR PREPARING THEREOF AND ANTIVIRAL PHARMACEUTICAL COMPOSITION COMPRISING THE SAME**

TRANSMITTAL LETTER

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith for filing in the U.S. Patent and Trademark Office is the following Patent Application:

- (1) Request for Corrected Official Filing Receipt;
- (2) Copy of the Official Filing Receipt with corrections marked in Red;
- (3) Copy of the Cover Page of the Published PCT Application;
- (4) Copy of the Executed Declaration.

The Commissioner is hereby authorized to charge any deficiency or credit any excess to Deposit Account Number 14-0112.

Respectfully submitted,  
**NATH & ASSOCIATES PLLC**

By:

Gary M. Nath  
Reg. No. 26,965  
Lee C. Heiman  
Reg. No. 41,827  
Customer No. 20529

Date January 18, 2006

**NATH & ASSOCIATES PLLC**  
112 South West Street  
Alexandria, VA. 22314  
703 548 6284

GMN/LCH:sw



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Group Art Unit: 1624

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Title: **6-METHYLPYRIDINE DERIVATIVES, METHOD FOR PREPARING THEREOF AND ANTIVIRAL PHARMACEUTICAL COMPOSITION COMPRISING THE SAME**

**REQUEST FOR CORRECTED OFFICIAL FILING RECEIPT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

1. Attached is a copy of the Official Filing Receipt received from the USPTO in the above application for which issuance of a corrected filing receipt is respectfully requested.

2. There is an error with respect to the following data, which is:

XXX incorrectly entered        omitted

**Error in:**

XXX Country of residence of all the (1-7) Inventors  
Japan

Correct Data: Country of residence of all the (1-7) Inventors  
Republic of Korea

Should any questions or comments arise in connection with the filing of this Request, Applicant respectfully requests a telephone call to the undersigned attorney at the telephone number as shown.

Respectfully submitted,  
**NATH & ASSOCIATES PLLC**

By:

Gary M. Nath  
Reg. No. 26,965  
Lee C. Heiman  
Reg. No. 41,827  
Customer No. 20529

Date January 18, 2006

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## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY.DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/528,461	03/21/2005	1624	500	26681U		3	3

## CONFIRMATION NO. 4853

20529  
 NATH & ASSOCIATES  
 1030 15th STREET, NW  
 6TH FLOOR  
 WASHINGTON, DC 20005

## FILING RECEIPT



\*OC000000016724814\*

Date Mailed: 08/15/2005

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Jong-Woo Kim, Anyang-si, JAPAN; Republic of Korea  
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 Joong-Chul Shin, Yongin-si, JAPAN; Republic of Korea

**Power of Attorney:** The patent practitioners associated with Customer Number 20529.

## Domestic Priority data as claimed by applicant

This application is a 371 of PCT/KR03/02034 10/02/2003

## Foreign Applications

REPUBLIC OF KOREA 10-2002-006-1994 10/11/2002

**Projected Publication Date:** 11/17/2005

**Non-Publication Request:** No

**Early Publication Request:** No

**\*\* SMALL ENTITY \*\***

**Title**

6-Methylpyridine derivatives, method for preparing thereof and antiviral pharmaceutical composition comprising the same

**Preliminary Class**

544

## **PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
22 April 2004 (22.04.2004)

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WO 2004/033450 A1

(51) International Patent Classification<sup>7</sup>: C07D 413/10

Gugal-ri, Giheung-eup, Yongin-si, Gyeonggi-do 449-900 (KR). SHIN, Joongchul [KR/KR]; 557-1, Goan-ri, Baekam-myeon, Yongin-si, Gyeonggi-do 449-863 (KR).

(21) International Application Number:  
PCT/KR2003/002034

(74) Agent: LEE, Duckrog; YEIL Patent & Trademark International. YEILPAT Bldg., 669-17, Yorksam-dong, Kangnam-gu, Seoul 135-915 (KR).

(22) International Filing Date: 2 October 2003 (02.10.2003)

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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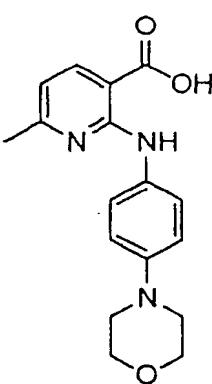
Published:

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(30) Priority Data:  
10-2002-0061994 11 October 2002 (11.10.2002) KR

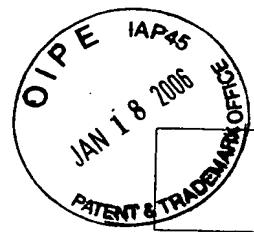
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: 6-METHYLPYRIDINE DERIVATIVES, METHOD FOR PREPARING THEREOF AND ANTVIRAL PHARMACEUTICAL COMPOSITION COMPRISING THE SAME



(I)

(57) Abstract: The present invention relates to 6-methylpyridine derivatives useful as an antiviral agent. More particularly, the present invention relates to novel 6-methylpyridine derivatives having an excellent inhibitory effect on replication of Hepatitis C virus (HCV), or pharmaceutically acceptable salts thereof, to a method for preparing thereof, and to an antiviral pharmaceutical composition comprising the compound as an active ingredient. The 6-methylpyridine derivatives of the present invention have an excellent inhibitory effect on replication of hepatitis C virus and thus can be advantageously used as a therapeutic or prophylactic agent of hepatitis C.



DECLARATION FOR PATENT APPLICATION

Attorney Docket:

Page 1 of 3

As a below-named inventor(s), I/we hereby declare that:

My/Our residence(s), post office address(es) and citizenship(s) is/are as stated below next to my/our name(s).

I/We believe I/we am/are the original inventor, first and sole (if only one name is listed below) or the original, first and joint inventors (if plural names are listed below) of the subject matter which is claimed, and for which a patent is sought on the invention entitled:

"6-METHYL PYRIDINE DERIVATIVE, METHOD FOR PREPARING THEREOF AND ANTVIRAL PHARMACEUTICAL COMPOSITION COMPRISING THE SAME"

the specification of which: (check one)  
[ ] is attached hereto

[x] was filed on October 2, 2003, as Serial No. PCT/KR2003/002031

and was amended on May 31, 2004 (if applicable)

We hereby state that we have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the patentability of this application as defined by 37 CFR § 1.56.

We hereby claim foreign priority benefits under 35 U.S.C. § 119 of any foreign application(s) for patent or inventor's certificate listed below, and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Applications:

2002-0061994 (Application No.)	KR (Country)	11 / 10 / 2002 (Day/Month/Year Filed)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
(Application No.)	(Country)	/ / (Day/Month/Year Filed)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
(Application No.)	(Country)	/ / (Day/Month/Year Filed)	<input type="checkbox"/> Yes	<input type="checkbox"/> No

I/We hereby appoint the Practitioners associated with the following Customer Number:

Customer Number 20539

#### Direct Telephone Calls to:

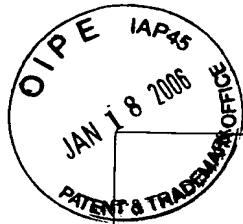
Gary M. Nath  
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Send Correspondence to:  
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Sixth Floor  
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ington, D.C. 20005 U.S.

We hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by 35 U.S.C. § 112, first paragraph, I/we acknowledge the duty to disclose material information as defined in 37 CFR § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

(U.S. Application Serial No.) (U.S. Filing Date) (Status--patented, pending, abandoned)

(U.S. Application Serial No.) (U.S. Filing Date) (Status)



DECLARATION FOR PATENT APPLICATION

Attorney Docket:  
Page 2 of 3

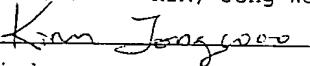
I/we hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below:

Application Number(s)

Filing Date

We hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. ' 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor: KIM, Jong-Woo

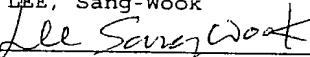
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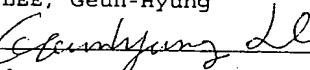
Inventor's Signature  Date: March 15, 2005

Residence: Anyang-si, Gyeonggi-do

Country of Citizenship: Republic of Korea

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Full name of third inventor: LEE, Geun-Hyung

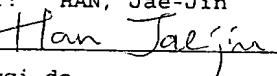
Inventor's Signature  Date: March 15, 2005

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Country of Citizenship: Republic of Korea

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Full name of fourth inventor: HAN, Jae-Jin

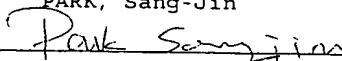
Inventor's Signature  Date: March 15, 2005

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Post Office Address: 102-506, Samick Apt., 14, Singal-ri, Giheung-eup, Yongin-si, Gyeonggi-do 449-863, Republic of Korea

Full name of fifth inventor: PARK, Sang-Jin

Inventor's Signature  Date: March 15, 2005

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Country of Citizenship: Republic of Korea

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## DECLARATION FOR PATENT APPLICATION

Attorney Docket:  
Page 3 of 3

Full name of sixth inventor: PARK, Eul-Yong

Inventor's Signature Eul-Yong Park Date: March 15, 2005

Residence: Yongin-si, Gyeonggi-do

Country of Citizenship: Republic of Korea

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Full name of sixth inventor: SHIN, Joong-Chul

Inventor's Signature Shin Joong-chul Date: March 15, 2005

Residence: Yongin-si, Gyeonggi-do

Country of Citizenship: Republic of Korea

Post Office Address: 557-1, Goan-ri, Baekam-myeon, Yongin-si, Gyeonggi-do 449-863, Republic of Korea